

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 12-21 and 23-29 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

2. Claim 21 is objected to because of the following informalities: Claim 21 claims "...network-compatible Plug and Play function , said program comprising code ..."
Claim 21 should claim "...network-compatible Plug and Play **function**, said program comprising code ..." Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 12-14, 16, 18, 20, 21, 23, 24, 26 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishio (US 2002/0156947) in view of Kimber (US 5,903,716) further in view of Osterman (US 2005/0108331).

Regarding Claim 12, Nishio teaches a network device management apparatus which communicates with a network device connected to a network (Page 1, paragraph

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2), where the network device has a print data generating function (Page 2, paragraph 28) and does not support any network-compatible Plug and Play function (Page 8, paragraphs 112 and 113), said apparatus comprising:

where the device ID includes at least information identifying the model, information indicating the manufacturer (Page 4, paragraph 60).

Nishio does not teach generating means generating a device ID corresponding to the print data generating function,

where each device ID includes at least information indicating the print data generating function of the network device, so that, in accordance with network-compatible Plug and Play function, a client apparatus on the network can install a device driver for controlling the print data generating function of the network device; and

sending means for sending to the client apparatus the device ID generated by said generating means;

request means for submitting a get request for device information to the network device specified by the device ID sent by said sending means; and

notification means for notifying the client apparatus that a service of the network device has stopped if said network device management apparatus does not receive a response to the get request from the network device.

Kimber does teach generating means generating a device ID corresponding to the print data generating function (Column 2, lines 5-28 and lines 50-60, wherein the address and the information shown to the user are forms of device IDs. The print data

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generating functions can be the default configuration as well as the operating parameters),

where each device ID includes at least information indicating the print data generating function of the network device, so that, in accordance with network-compatible Plug and Play function, a client apparatus on the network can install a device driver for controlling the print data generating function of the network device (Column 2, lines 5-28 and lines 50-60, wherein, according to Nishio in paragraph 113, a legacy device is a device that does not support PNP); and

sending means for sending to the client apparatus the device ID generated by said generating means (Column 2, lines 5-28 and lines 50-60).

Nishio and Kimber are combinable because they both teach accessing a printer across a network.

Therefore it would have been obvious to one of ordinary skill in the art the time the invention was made to combine the teachings of Nishio with the teachings of Kimber for the purpose of operating a single printer in accordance with a plurality of default configurations (Kimber: Column 2, lines 5-14).

Osterman does teach request means for submitting a get request for device information to the network device specified by the device ID sent by said sending means (Page 3, paragraphs 35 and 36, wherein the get request corresponds to the discovery request); and

notification means for notifying the client apparatus that a service of the network device has stopped if said network device management apparatus does not receive a

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response to the get request from the network device (Page 3, paragraphs 35 and 36, wherein the get request corresponds to the discovery request. Detecting the service has stopped is determining that the device is off-line. This is notifying the client device that the service is stopped.).

Nishio and Osterman are combinable because they both teach accessing a printer across a network.

Therefore it would have been obvious to one of ordinary skill in the art the time the invention was made to combine the teachings of Nishio with the teachings of Osterman determining when the device is available for use (Osterman: Page 1, paragraph 3).

Regarding Claim 13, Nishio further teaches storage means for storing protocol information required to communicate with a network device (Page 4, paragraph 66).

Regarding Claim 14, Nishio further teaches control means for, when job information addressed to a virtual representation of the network device as a device which supports the network-compatible Plug and Play function is received, acquiring an address and protocol information of the network device from said storage means, converting the job information into the acquired protocol, and transmitting the converted information to the acquired address (Page 4, paragraph 66).

Regarding Claim 16, Nishio further teaches search means for searching for a network device which does not support the network-compatible Plug and Play function (Page 8, paragraph 113); and

registration means for registering in said storage means a network address of a network device found by said search means, and information specifying one or more protocols, including at least Simple Management Protocol (SNMP), used in a communication with the network device found by said search means (Page 8, paragraphs 111, 113 and 114).

Regarding Claim 18, Nishio further teaches wherein the network device is a network printer (Page 2, paragraph 28).

Regarding Claim 20, Nishio teaches a method of controlling a network device management apparatus which communicates with a network device that is connected to a network (Page 1, paragraph 2), where the network device has a print data generating function (Page 2, paragraph 28) and does not support any network-compatible Plug and Play function (Page 8, paragraphs 112 and 113); said method comprising the steps of:

where the device ID includes at least information identifying the model, information indicating the manufacturer (Page 6, paragraph 60).

Nishio does not teach said method comprising the steps of:

generating a device ID corresponding to the print data generating function,

where the device ID includes at least information the print data generating function of the network device, so that, in accordance with the network-compatible Plug and Play function, a client apparatus on the network can install a device driver for controlling the print data generating function; and

sending to the client apparatus the device ID generated in said generating step;

submitting a get request for device information to the network device specified by the device ID sent in said sending step; and

notifying the client apparatus that a service of the network device has stopped if the network device management apparatus does not receive a response to the get request from the network device.

Kimber does teach said method comprising the steps of:

generating a device ID corresponding to the print data generating function (Column 2, lines 5-28 and lines 50-60, wherein the address and the information shown to the user are forms of device IDs. The print data generating functions can be the default configuration as well as the operating parameters),

where the device ID includes at least information the print data generating function of the network device, so that, in accordance with the network-compatible Plug and Play function, a client apparatus on the network can install a device driver for controlling the print data generating function (Column 2, lines 5-28 and lines 50-60, wherein, according to Nishio in paragraph 113, a legacy device is a device that does not support PNP); and

sending to the client apparatus the device ID generated in said generating step (Column 2, lines 5-28 and lines 50-60).

Nishio and Kimber are combinable because they both teach accessing a printer across a network.

Therefore it would have been obvious to one of ordinary skill in the art the time the invention was made to combine the teachings of Nishio with the teachings of Kimber for the purpose of operating a single printer in accordance with a plurality of default configurations (Kimber: Column 2, lines 5-14).

Osterman does teach submitting a get request for device information to the network device specified by the device ID sent in said sending step (Page 3, paragraphs 35 and 36, wherein the get request corresponds to the discovery request); and

notifying the client apparatus that a service of the network device has stopped if the network device management apparatus does not receive a response to the get request from the network device (Page 3, paragraphs 35 and 36, wherein the get request corresponds to the discovery request. Detecting the service has stopped is determining that the device is off-line. This is notifying the client device that the service is stopped.).

Nishio and Osterman are combinable because they both teach accessing a printer across a network.

Therefore it would have been obvious to one of ordinary skill in the art the time the invention was made to combine the teachings of Nishio with the teachings of

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Osterman determining when the device is available for use (Osterman: Page 1, paragraph 3).

Regarding Claim 21, Nishio teaches a non-transitory computer-readable storage medium (Page 8, paragraph 120), storing in executable form, a program for causing a computer to serve as a network device management apparatus which communicates with a network device that is connected to a network (Page 1, paragraph 2), where the network device has a print data generating function (Page 2, paragraph 28) and does not support any network-compatible Plug and Play function (Page 8, paragraphs 112 and 113); said method comprising the steps of:

where the device ID includes at least information identifying the model, information indicating the manufacturer (Page 6, paragraph 60).

Nishio does not teach said method comprising the steps of:

generating a device ID corresponding to the print data generating function,

where the device ID includes at least information the print data generating function of the network device, so that, in accordance with the network-compatible Plug and Play function, a client apparatus on the network can install a device driver for controlling the print data generating function; and

sending to the client apparatus the device ID generated in said generating step;

submitting a get request for device information to the network device specified by the device ID sent in said sending step; and

notifying the client apparatus that a service of the network device has stopped if the network device management apparatus does not receive a response to the get request from the network device.

Kimber does teach said method comprising the steps of:

generating a device ID corresponding to the print data generating function (Column 2, lines 5-28 and lines 50-60, wherein the address and the information shown to the user are forms of device IDs. The print data generating functions can be the default configuration as well as the operating parameters),

where the device ID includes at least information the print data generating function of the network device, so that, in accordance with the network-compatible Plug and Play function, a client apparatus on the network can install a device driver for controlling the print data generating function (Column 2, lines 5-28 and lines 50-60, wherein, according to Nishio in paragraph 113, a legacy device is a device that does not support PNP); and

sending to the client apparatus the device ID generated in said generating step (Column 2, lines 5-28 and lines 50-60).

Nishio and Kimber are combinable because they both teach accessing a printer across a network.

Therefore it would have been obvious to one of ordinary skill in the art the time the invention was made to combine the teachings of Nishio with the teachings of Kimber for the purpose of operating a single printer in accordance with a plurality of default configurations (Kimber: Column 2, lines 5-14).

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Osterman does teach submitting a get request for device information to the network device specified by the device ID sent in said sending step (Page 3, paragraphs 35 and 36, wherein the get request corresponds to the discovery request); and

notifying the client apparatus that a service of the network device has stopped if the network device management apparatus does not receive a response to the get request from the network device (Page 3, paragraphs 35 and 36, wherein the get request corresponds to the discovery request. Detecting the service has stopped is determining that the device is off-line. This is notifying the client device that the service is stopped.).

Nishio and Osterman are combinable because they both teach accessing a printer across a network.

Therefore it would have been obvious to one of ordinary skill in the art the time the invention was made to combine the teachings of Nishio with the teachings of Osterman determining when the device is available for use (Osterman: Page 1, paragraph 3).

Regarding Claim 23, Nishio further teaches storing protocol information required to communicate with a network device (Page 4, paragraph 66).

Regarding Claim 24, Nishio further teaches a control step of, when job information addressed to a virtual representation of the network device as a device

which supports the network-compatible Plug and Play function is received, acquiring an address and protocol information of the network device stored in said storing step, converting the job information into the acquired protocol, and transmitting the converted information to the acquired address (Page 4, paragraph 66).

Regarding Claim 26, Nishio further teaches a search step of searching for a network device which does not support any network-compatible Plug and Play function (Page 8, paragraph 113); and

a registration step of registering in the storage means a network address of a network device found in said search step, and information specifying one or more protocols, including at least Simple Network Management Protocol (SNMP), used in a communication with the network device found in said search step (Page 8, paragraphs 111, 113 and 114).

Regarding Claim 28, Nishio further teaches wherein the network device is a network printer (Page 3, paragraph 28).

Conclusion

3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NICHOLAS PACHOL whose telephone number is (571)270-3433. The examiner can normally be reached on M-Th: 8-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler Haskins can be reached on 571-272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/N. P./

Examiner, Art Unit 2625

08/26/11

/Twyler L. Haskins/

Supervisory Patent Examiner, Art Unit 2625